

CHAPTER 12. ENVIRONMENTAL CONSIDERATIONS AND RESPONSIBILITIES

SECTION 2. AIRCRAFT NOISE

1861. PERTINENT REGULATIONS AND ORDERS.

A. As a result of § 44715 of Title 49, United States Code (U.S.C.) (formerly § 611 of the Federal Aviation Act (FA Act) of 1958), the Federal Aviation Administration (FAA) adopted Federal Aviation Regulations (FAR) Part 36, which establishes noise standards for issuance of aircraft type certificates, changes to those certificates, and to standard airworthiness certificates. To complement FAR Part 36, the FAA issued FAR Part 91, Subpart I, requiring civil, subsonic turbojet aircraft over 75,000 pounds, which do not meet the FAR Part 36 noise standards, to be modified by January 1, 1985, if these aircraft are to operate at United States (U.S.) airports.

B. Special Federal Aviation Regulation (SFAR) 47, effective February 26, 1985, provides for limited issuance of special flight authorizations to conduct certain nonrevenue operations that are otherwise prohibited by the noise restrictions in FAR Part 91, Subpart I. Permissible operations include flights to an airport for alterations to achieve noise compliance, for exportation of the aircraft, and for scrapping the airplane. These special flight authorizations are issued by the Office of Environment and Energy (AEE-1).

C. FAA Order 1050.13, "Replacement, Apportionment, and Compliance Plans Submitted Under Subpart E of FAR Part 91," (this order predates Subpart I) establishes procedures and assigns responsibilities for aircraft noise compliance plans submitted by U.S. operators under Subpart I of FAR Part 91.

1863. FLIGHT STANDARDS RESPONSIBILITIES. As of January 1, 1985, all civil turbojet aircraft with maximum weights of more than 75,000 pounds that are U.S. registered and have standard airworthiness certificates (or equivalent aircraft that are foreign registered) operating into U.S. airports, must have been shown to comply with Stage 2 or Stage 3 noise levels as specified in Appendix C of FAR Part 36. The showing of compliance, for aircraft issued original standard airworthiness certificates after the appropriate dates specified in FAR § 36.1, is accomplished during the aircraft certification process. Operators of these aircraft automatically comply with FAR

Part 91, Subpart I, aircraft noise requirements and no specific flight standards responsibilities are defined. Operators of aircraft issued original standard airworthiness certificates before the appropriate dates specified in FAR § 36.1 were required by FAR Part 91, Subpart I, to make a specific showing of compliance or submit a compliance plan and status reports to AEE-1. Alternatively, the operator may apply for an exemption from that office. Questions concerning a specific aircraft type or a specific operator's compliance status with FAR Part 91, Subpart I, should be directed to AEE-110. In addition, AEE-110 will provide copies of compliance plans, status reports, and any exemptions upon request. With respect to aircraft noise and FAR Part 91, Subpart I, requirements, Flight Standards inspectors are responsible for the following:

A. For any flight operation suspected of being in violation of FAR Part 91, Subpart I, inspectors must initiate an investigation and prepare an Enforcement Investigation Report (EIR), if appropriate (see FAA Order 2150.3A, "Compliance and Enforcement Program"). Upon initiation of an investigation, AEE-1 and the Regional Flight Standards Division (RFSD) shall be notified. Assistance may be requested from these offices if considered necessary.

B. When known, the RFSD will be notified of any operator who has failed to submit the compliance plans and status reports required by FAR § 91.813. The Flight Standards division will also be notified when it is suspected that an operator has failed to comply with its submitted compliance plan. The Flight Standards division will, in turn, notify AEE-1 and regional counsel. Flight Standards field inspectors will take action only when directed by the RFSD in coordination with both the regional counsel and AEE-1.

C. Inspectors shall surveil assigned FAR Part 121, 125, and 135 certificate holders (including FAR Part 125 deviation holders) who operate Stage 1 aircraft under FAR § 91.801 to determine the following:

- That an appropriate exemption (either under FAR Part 11 or FAR 91.811) is aboard each aircraft

- That the operator continues to provide AEE-1 with current compliance plan status reports as required by FAR § 91.813 (FAA Order 1050.13 provides additional information on required compliance plans and status reports.)
- That the operator is complying with all exemption restrictions, such as night curfews

D. District offices having responsibility for FAR Part 129 operators should conduct liaison and/or surveillance as necessary to determine compliance with the FAR Part 91 noise limits (the operator is using only aircraft that are compliant or exempted). Suspected violations must be investigated, and an EIR must be prepared, if appropriate.

E. Inspectors shall surveil flight operations conducted under SFAR 47 to determine the following:

- That a special flight authorization is on board the airplane during all operations at U.S. airports
- That the operator is complying with all conditions and limitations established by the authorization
- That the airplane has an appropriate airworthiness certificate or ferry permit to perform the flight

1865. HEAVY AIRPLANE OPERATORS' COMPLIANCE WITH APPROVED NOISE ABATEMENT DEPARTURE PROFILES (NADP).

A. *Background.* To resolve a continuing problem of nonstandard NADP's, the FAA published an advisory circular (AC) that contains the minimum performance criteria for noise abatement vertical departure profiles where configuration (thrust and/or flap) changes are required below 1,500 feet above ground level (AGL) for noise. These minimum criteria were formalized in AC 91-53, "Noise Abatement Departure Profiles," dated July 22, 1993. This AC establishes minimum acceptable criteria for speed, thrust settings, airplane configurations, and the criteria for both the "Close-In" (for close-to-the-airport communities) and "Distant" (for distant airport communities) NADP's. These NADP's can be combined with preferential runway selection and flight path techniques to minimize the community noise impact.

B. Principal Operations Inspector (POI) Responsibilities.

(1) *Familiarization with AC 91-53.* POI's should become familiar with the material in AC 91-53 before approving an assigned certificate holder's

NADP manual procedures. The certificate holder shall not use or be approved for any other departure profile (except as stated in FAR Part 91) that is not defined within the AC. FAR Part 91 departure procedures require an airplane to "climb to an altitude of 1,500 feet above the surface as rapidly as practicable," and are not required to conform to AC 91-53.

(2) *Vertical Departure Profiles.* POI's must ensure that all airplane vertical departure profiles (profiles with configuration changes below 1,500 feet) described in the certificate holder's operations and/or training manuals comply with the minimum criteria established in AC 91-53 for NADP's (Close-In and Distant). AC 91-53 offers the operator one means of complying with the noise abatement departure procedure, but not the only means. If the operator chooses a procedure that differs from the criteria in the AC, then the proposed procedure must be addressed by the certificate holder to the certificate holder's POI for concurrence by AFS-400 of the Flight Standards Service.

(3) *Operations Specifications.* POI's should review operations specifications nonstandard paragraph C68 before approving the certificate holder's operations specifications. Volume 3, chapter 1, section 5, paragraph 196, contains instructions for issuance of paragraph C68 for approval of the NADP's.

NOTE: POI's must review the certificate holder's operations and training manuals that describe the certificate holder's departure profiles for compliance with the minimum criteria as stated in the revised operations specifications paragraph C68.

1867. AIRTOUR AND SIGHTSEEING OPERATIONS.

A. *Background.* Aviation accidents within and around the Grand Canyon and other prominent tourist attractions have heightened public interest in safety of sightseeing and air tour operations. Also, patrons of the Grand Canyon and other national parks have expressed concern to their congressional representatives about the noise generated by overflying aircraft. Environmental lobby organizations have also expressed their concerns for potential environmental damage and harm to the natural inhabitants of these areas. Overuse of these natural preserves will impede their preservation for future generations.

B. Grand Canyon National Park and the State of Hawaii.

(1) Congressional concerns over air safety and aircraft noise resulted in the enactment of Public Law 100-91 on August 18, 1987. This law required a study of aircraft noise effect at a number of national parks.

The law also imposed flight restrictions at the following three parks: Grand Canyon National Park in Arizona, Yosemite National Park in California, and Haleakala National Park in Hawaii.

(2) Presently, the Grand Canyon National Park and the state of Hawaii are the only areas with special operating rules governing aircraft overflights and requirements for operators conducting sightseeing flights under FAR Part 135.

NOTE: SFAR 71 prescribes special operating rules for airplane and helicopter visual flight rules (VFR) airtour operations conducted in the state of Hawaii under FAR Parts 91 and 135. This rule does not apply to flights conducted in gliders or hot air balloons. Future revisions to this handbook will contain additional guidance concerning special operating rules for airtour operations in the state of Hawaii.

C. Identification of Other Scenic Areas. The appropriate FAA regional offices and Flight Standards District Offices (FSDO) are responsible for the acknowledgment and identification of scenic areas attracting airtours and sightseeing operations in each FAA region. These offices should encourage meetings of joint users in order to develop acceptable flight programs. The FAA Regional Environmental Office and Air Traffic Control Service (ATC) should be included in meetings for planning special-use airspaces. POI's should encourage all assigned operators, including non-certificated commercial sightseeing and FAR Part 135 operators, to cooperate in complying with procedures established for each scenic flight area. FSDO's should extensively distribute information regarding special routes to prevent conflicts among airspace users. The following procedures apply to POI's who are working with FAR Part 135 operators conducting airtour operations and with other operators conducting sightseeing operations in other areas under FAR Parts 91 and 135:

- Identifying scenic areas subject to airtour/sightseeing operations
- Identifying actual and potential airtour/sightseeing operators
- Coordinating with ATC, when appropriate, and with airspace users in cooperatively establishing recommended routes, entry/exit points, altitudes, direction of flight, and reporting points
- Encouraging the participation of non-certificated sightseeing operators

NOTE: An environmental impact study (EIS) may be required for any routes developed below 3,000 feet AGL.

D. Operations Specifications.

(1) Airtours and sightseeing flights conducted within the Grand Canyon National Park Special Flight Rules Area require FAR Part 135 operators to hold a special operations specifications authorization. Inspectors with operators aspiring to conduct operations within the Grand Canyon National Park Special Flight Rules Area should coordinate with the Western-Pacific regional office.

(2) Special regulations, which may be developed in the future for another area, park, or prominent attraction, should be identified, and any special operational authority should be listed as a note in paragraph B of the operations specifications. The suggested wording for such an entry follows:

Special Requirements: Note 1.

Airtour/sightseeing operations are authorized to be conducted over [*list appropriate area, river, or prominent point of interest*] in accordance with procedures outlined within the operator's operations manual.

(3) The routes and altitudes depicted in the operator's operations specifications should enhance collision avoidance procedures and aircraft noise abatement. The identification of sightseeing areas and routes does not relieve the pilot-in-command (PIC) from the responsibility to see and avoid other aircraft.

E. Operations Manual.

(1) The POI must coordinate with the Las Vegas FSDO through the Western-Pacific regional office in order to grant approval for an operator to conduct sightseeing and/or airtours in the Grand Canyon. Special programs developed through the Las Vegas FSDO require the operator to hold operations specifications that grant flight authority in Special Flight Rule airspace.

(2) For attractions and areas other than the Grand Canyon, POI's should recommend that operators have a chapter in their operations manual containing an outline of procedures for crewmembers conducting airtour/sightseeing operations. This chapter should contain the following:

(a) The airtour/sightseeing area should be clearly depicted on a chart and explained in words to ensure the reader's comprehension of the tour area.

(b) All tour area entry/exit points should be points for radio reports on a common-use air-to-air frequency.

(c) There should be a clear description of tour routes, altitudes, and reporting points.

(d) It should include procedures for obtaining current weather information and weather deviations. (The operator should consider higher VFR weather minimums for flight operations in high density traffic where airtour/sightseeing operators enter and depart special airspace.)

(e) Any collateral duties should be listed, such as the pilot narrating a tour or operating tape players for passengers. (These shall only be performed when the pilot's workload permits; compliance with FAR § 135.100(b) is still required.)

(f) There should be provision for additional crewmember training, if necessary. Ground and flight training may be required for each additional airtour/sightseeing operation.

1868. RESERVED

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